BAILEY WASTE DISPOSAL TEXAS EPA ID# TXD980864649



EPA REGION 6

CONGRESSIONAL
DISTRICT 02
Orange County

Other Names: Gulf States Utility Bailey's Sabine Lake Bridge

Updated: 09/17/01

Site Description

Location:

- Three miles southwest Bridge City, Orange County, Texas.
- North of Neches River near Highway 87.

Population:

- The immediate site area is sparsely populated.
- Approximately 7,600 people within three miles of the site use wells for drinking water.

Setting:

- The nearest residence to the site is two miles.
- Nearest drinking water well is 1,200 feet.
- The site is situated in a marsh area.
- The site was characterized by a series of waste pits, a drainage channel, a drum disposal area, a waste channel, and a large surface impoundment.
- Waste has been documented on ten acres of the site.

Hydrology:

- Gulf Coast Aquifer.
- Seasonal high level is about 5 ft.
- Silty clay layer beneath the site.
- Shallow ground water directly beneath the waste is contaminated with organic chemicals and heavy metals.
- Area drinking water wells are located in deeper aquifers which show no contamination from the site.

Wastes and Volumes -

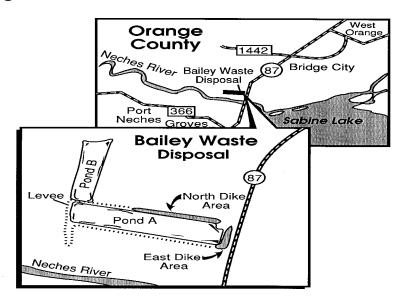
- The principal pollutants at the Bailey Waste Disposal site are metals, arsenic compounds, benzene, phenols, pyridenes, naphthalenes, and chlorinated hydrocarbons in soil.
- Waste volume is approximately 156,000 cubic yards

Site Assessment and Ranking -

NPL LISTING HISTORY

Site HRS Score: 53.42 Proposed Date: 10/05/84 Final Date: 5/20/86 NPL Update: No. 2

Site Map and Diagram



The Remediation Process

Site History:

- The site began receiving industrial and municipal wastes in 1950.
- Gulf State Utilities purchased the property in 1971.
- The site was identified in the 1979 Eckardt Report
- In November and December 1984, the Potentially Responsible Parties (PRPs), with EPA oversight, fenced the site and posted warning signs.
- The Remedial Investigation (RI) was conducted by the Texas Department of Water Resources (TDWR), now the Texas Natural Resource Conservation Commission (TNRCC), from 12/84 to 10/87.
- The PRPs conducted the Feasibility Study (FS) from 10/87 to 3/88, with EPA oversight.

Health Considerations:

• Analysis conducted by the State revealed chloroform, phthalates, trichloroethylene, and other compounds in surface water, ground water, and soils on the site.

Other Environmental Risks:

- About 7600 people within three miles of the site use ground water as their primary source of drinking water.
- Marsh was directly impacted from the waste which has migrated into it. Waste has been removed from marsh.

Record of Decision

Signed: June 28, 1988

Explanation Of Significant Differences North Marsh February 8, 1996

Explanation Of Significant Differences Pit B May 1, 1996

Record of Decision Amendment December 16, 1996

Soil Treatment:

- Contaminated material from the drum disposal area and drainage channel was moved (consolidated) to the waste channel. An Explanation of Significant Difference (ESD) was issued by the EPA to address the contaminated marsh sediments. These sediments have been taken off-site for disposal in a Class 1 industrial waste landfill (see Present Status and Issues section below for further discussion this ESD).
- The consolidated material has been capped to prevent movement off-site.

Other Remedies Considered

Reason Not Chosen

1. No Action

- 2. On-site landfill
- 3. Off-site landfill
- 4. On-site Incineration
- 5. On-site Incineration, and Off-site landfill

Not protective of human health and the environment Short term impacts Short term impacts Short term impacts, implementability

Short term impacts, implementability

Remedial Time Line -

- The Bailey Site Settlers Committee (PRPs) initiated the Remedial Design in 3/89.
- Construction of the remedy, or Remedial Action (RA) by the PRPs began in 2/92.
- On site construction activities completed in 8/97.

Community Involvement -

- Community Involvement Plan: Developed 6/85, revised 3/89
- Open houses and workshops: 11/84, 2/85, 10/85, 8/92, 7/93
- Proposed Plan Fact Sheet and Public Meeting: 5/88
- ROD Fact Sheet: 7/88
- Explanation of Significant Difference Newspaper Public Notice: 4/96
- ROD Amendment Public Meeting: 10/96
- Five-Year Review Newspaper Notification: 6/30/00 7/09/00
- Milestone Fact Sheets: 10/85, 9/89, 10/89, 6/90, 2/92, 8/92, 2/93, 7/93, 9/95, 8/99
- Citizens on site mailing list: 96
- Constituency Interest: Citizen interest in the site is low.
- Site Repository: Nederland Public Library, 1903 Atlanta, Nederland, Texas 77627 409-722-1255

Technical Assistance Grant

• Availability Notice: 2/89

• Letters of Intent Received: None

• Grant Award: N/A

• Current Status: No apparent citizen interest in the grant.

Contacts —

- Remedial Project Manager (EPA): Chris Villarreal, 214-665-6758, Mail Code: 6SF-AP
- State Contact: (TNRCC) Jim Feely, 512/239-2462
- Attorneys (EPA): Anne Foster, 214-665-2169; Amy McGee, 214-665-8063, Mail Code: 6RC-S
- State Coordinator (EPA): Karen Bond, 214-665-6682, Mail Code: 6SF-AP

Enforcement —

- General Notice Letters sent to seven parties to conduct the Remedial Investigation 12/17/84.
- General Notice Letters sent to 19 parties to conduct the Feasibility Study 08/13/87.
- In October 1987, the EPA signed an Administrative Order on Consent with the Texaco Butadiene Company, Browning-Ferris, E.I. DuPont, Uniroyal Goodrich Tire Company, Atlantic Richfield Company, and French Limited to conduct the site feasibility study.
- Special Notice Letters sent to 21 parties to conduct the Remedial Design/Remedial Action -04/20/88.
- On April 30, 1990, the court entered a Consent Decree which outlined a settlement between the EPA and the parties listed below (Bailey Site Settlors Committee BSSC) whereby the BSSC would conduct the sites Remedial Design and Remedial Action (RD/RA) and EPA would reimburse the BSSC for 20% of eligible RD/RA costs. Members of the BSSC include: Browning-Ferris Industries Chemical Services, Inc. As Successor to CESCO INC.; Chevron Chemical Company as Successor to the Interest of Gulf Corporation; E.I. DuPont De Nemours & Company (Inc.); French Limited, French Ltd. of Houston, Inc.; Luther P. Hendon (Individual); George A, Whitten (Individual); Gulf States Utilities Company; Owens-Illinois, Inc.; Phillips Petroleum Company; Texaco Chemical Company as Successor in Interest to Neches Butane Products Company and Texaco Butadiene Company; the Uniroyal Goodrich Tire Company as Successor in Interest to the B.F. Goodrich Company; Uniroyal, Inc.; Uniroyal Tire Company, Inc.; and Synpol Inc.
- On July 19, 1995 the court entered a Consent Decree which outlined a settlement between the EPA and the parties listed below whereby the parties would pay EPA the greater of the following: (1) 85.3 percent of those claims submitted by the BSSC and approved for payment from the Fund by EPA (as discussed above), or, (2) \$2.6 million. Provided, however, that the claims submitted by the BSSC, and approved by EPA, total less than \$2.6 million the parties listed below shall pay all such claims. The parties to this Consent Decree are: Allied-Signal, Inc.; Atlantic Richfield Company; Bridgestone/Firestone, Inc., formerly d/b/a/ The Firestone Tire and Rubber Company; The Dow Chemical Company; Goodyear Tire & Rubber Company; Mobil Oil Corporation; Olin Corporation; PPG Industries, Inc.; Union Oil of California, d/b/a/ Unocal; and Unocal Corporation.

Present Status and Issues -

- Fencing the area and posting warning signs have limited access to the site, thereby reducing the potential of exposure to hazardous substances at the Bailey Waste Disposal. One of the two fences which provide restrict access to the site from highway 87 was illegally taken down. This fence was replaced.
- Remedy construction (Remedial Action) by the PRPs with EPA oversight has been completed.
- The onsite in situ stabilization of wastes began in September 1993. The PRP's contractor had problems meeting the project stabilization requirements. Efforts to resolve this problem have included conducting an independent in situ stabilization field pilot. The PRPs, as directed by the EPA,

reevaluated the original remedy and developed potential remedy alternatives.

- An Explanation of Significant Differences (2/8/96) addressing waste in the site's North Marsh area has been implemented by the PRPs. Affected marsh sediments, which make up less than four percent of the total site waste, have been excavated from the North Marsh and taken off-site for disposal in a Class 1 industrial waste landfill. Reasons for this remedy component change include:
 - 1) the opportunity to expedite the affected marsh sediments remedy component by taking these sediments off-site for disposal;
 - 2) the excavation of the affected marsh sediments, which are the only site waste not contained within a levee, will remove these sediments from direct contact with the marsh sediments;
 - 3) remediation activities within the Waste Channel Area, which was to have received the affected marsh sediments, were being reevaluated at the time; and
 - 4) an estimated \$900,000 in costs savings for the affected marsh sediment remedy component.
- An Explanation of Significant Differences (5/01/96) address waste in the site's Pit B has been implemented by the PRPs. Approximately 12,000 cubic yards of waste and affected sediments contained within Pit B have been excavated and taken off-site for disposal. Pit B may have been the source of waste which had migrated into the North Marsh.
- A Record of Decision Amendment (12/16/96) was issued after the end of a public comment period in which EPA received no comments either in writing or during the ROD Amendment public meeting. The amended remedy called for the following remedy components:
 - waste consolidation within the site's waste areas (i.e., East Dike Area, North Dike Area);
 - grading of the waste using general fills to provide a mild slope for the base of the cap and to promote storm water runoff;
 - construction of a lightweight composite cap and related appurtenances with modification as appropriate to satisfy site-specific design criteria and constraints;
 - installation of a consolidation water collection system to intercept and remove groundwater that rises in the short term (i.e., during construction of the cap) due to consolidation of the waste; this water was taken off-site for disposal);
 - installation of storm water management controls to treat storm water runoff from disturbed areas during construction and to divert storm water away from inactive or completed areas of the site;
 - modifications to existing dikes and side slopes included adjustment of top elevations to tie into the cap, repair/modifications of areas that have experienced excessive settlement, and erosion/slope protection measures; and
 - construction and maintenance of access roads.

The amended remedy in combination with the two previous ESDs provides an overall site remedy that is protective of human health and the environment and complies with Federal and State applicable or relevant and appropriate requirements.

In January 1997, construction activities for the Amended ROD began. Construction activities were completed in August 1997.

• In September 2000 EPA completed conducting a Five-Year Review of the site. The purpose of the Five-Year Review was to evaluate if the selected remedy has remained effective for the overall

protection of human health and the environment. The Five-Year Review determined that the remedy for the Bailey Waste Disposal Site is protective of human health and the environment, and will remain so provided the action items identified in the Five-Year Review Report are addressed. Specifically, differential settlement observed on the North Dike Area and other site maintenance issues identified during the five year review will need to be closely monitored and corrected, as needed. To achieve long-term effectiveness of the remedy, it will be necessary to maintain the integrity and effectiveness of the final cover, including making repairs to the cap as necessary to correct the effects of settling, subsidence, erosion, or other events. The long-term effectiveness of the remedy will also be contingent upon the implementation of all necessary institutional controls. The Five-Year Review Report was signed on September 28, 2000. A copy of this report was made available for review at the site repository - the Nederland Public Library, in November 2000.

Benefits _____

- Over 156,000 cubic yards of hazardous materials have been remedied to prevent offsite migration.
- Sensitive wetlands have been protected and made safe for wildlife and recreational activities.